AmeriCares

Current Practices in Medical Outreach

Results of an Online Survey

Funded by the Godley Family Foundation

August 2013

Executive Summary

AmeriCares conducted an online survey of medical volunteers recently active in international, short-term medical missions as part of a larger study to develop a framework of best practices for medical outreach. The purpose of the survey was to determine the composition of this community and their current practices, measure the extent to which they value and incorporate best practices into their work and identify resource gaps.

The survey launched in June 2013 with questions designed around a proposed framework of best practice elements informed by a literature review of existing published resources and a rigorous critique by experienced internal and external advisors to the AmeriCares Medical Outreach program. The framework elements include: preparation, partnership, education, evaluation and sustainability.

Survey results indicate that teams are diverse in many respects but share a desire to implement best practice elements and make lasting improvements in community health and health care capacity. Partnership emerged as a defining indicator of the incorporation of best practice activities. Results of this survey will guide an AmeriCares Best Practices Initiative to help medical outreach teams improve health outcomes, increase local health care capacity and build sustainable partnerships.

Background

There is a growing and diverse community of health care professionals passionate about improving global health and willing to donate their time, services and resources towards that goal. Their individual efforts vary widely and are burdened by the complex tasks of managing team funding, staffing, equipping and logistics while seeking to build effective, sustainable in-country partnerships.

Each year, AmeriCares supports more than 1,000 teams of volunteer medical professionals representing many hundreds of U.S.-based nonprofits. Teams travel to over 80 countries to work in communities where access to health care and medicines is limited or nonexistent. They provide primary care, perform surgeries, strengthen local health care capacity and respond to emergencies.

Funding from the Godley Family Foundation has allowed AmeriCares to take a systematic, in-depth look at its Medical Outreach program and current medical outreach practices. This survey is part of a larger study to develop an evidence-based set of best practices that will serve as the foundation of an initiative to improve medical outreach impact.

Methods

Using information from a literature review on international medical volunteerism and standards, a 38 question online survey was created to examine current practices among health care providers who participated in a short-term medical trip within the past two years. The survey consisted of questions to determine basic parameters regarding a provider's most recent trip including purpose, setting, activities and outputs of the team, as well as the extent to which elements of best practices were incorporated into their work. Of the 38 survey questions, 31 were close-ended, five were open-ended as well as two Likert-scale questions comprised of 11 statements to rate for degree of agreement.

Prior to launch, the survey was vetted internally by senior staff at AmeriCares, including our medical director, as well as externally by two Medical Outreach Working Group members, seven medical outreach team leaders and by 24 short-term medical trip participants.

Survey Monkey™, an online survey and analysis tool, was used to distribute the survey, collect anonymous response data and manage the blind drawing for an incentive prize. The online survey was emailed on June 17, 2013 to 1,561 recent recipients of an AmeriCares product donation who had traveled within the past year and a half. The response rate was 36 percent with 580 surveys returned by the closing of the survey on July 1.

The data cleaning process removed partial or incomplete surveys from the dataset (n=19), as well as surveys that were deemed incongruent for example, where respondents answered mostly "not applicable," (n=4). A statistical analysis was conducted on the close-ended questions to look for correlations and statistically significant differences amongst the data using IBM SPSS (version 20.0.0.1). Qualitative data were systematically analyzed and recoded for evaluation when possible.

Results

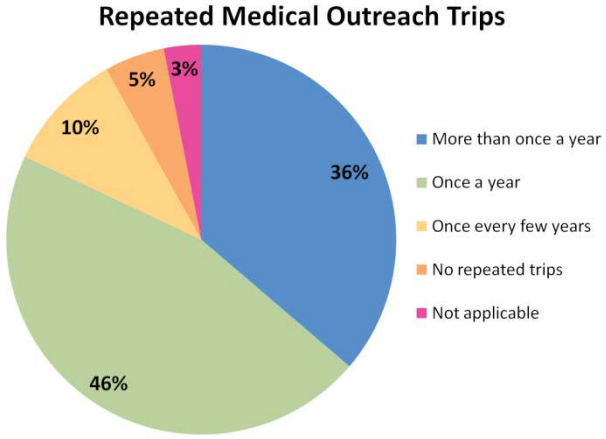
Of the 580 completed surveys returned, 557 surveys were deemed valid for analysis. The basic profile and composition of the respondent sample resembles the general AmeriCares profile of Medical Outreach teams and is similar to those from an analysis of our internal program database. Analysis of results is organized around key findings and best practice elements. Graphs of statistically significant correlations are at the end of this report.

Team and Trip Characteristics

Respondents: The majority of respondents were licensed health care providers (80%) and the lead medical provider for the outreach team (59%). Their professional affiliation was primarily private practice medicine (36%), followed closely by clinic or hospital (31%). Their sponsoring organization was most often a U.S. registered non-profit or foundation (51%) and another 29 percent identified their sponsoring organization as faith-based.

Teams: As is the case in the global medical outreach community (see Chapin and Doocy 2010 and Maki et al 2008), the make-up of teams varied widely. While the average number of team members was 21, team size ranged from one person to as many as 173 members. The average number of U.S.-licensed medical providers on the team was nine, but ranged from 0-90 providers.[1] Analysis of the data revealed a minor trend that smaller teams were more likely to identify their trip purpose as primary care (p-value =0.094). Conversely, larger teams were more likely to be surgical teams, likely due to the large number of supporting staff needed to support a surgery trip.

Trips: Medical Outreach teams generally take part in what the literature calls "short term medical missions," (see Chiu et al 2012, Maki et al 2008); 92 percent of trips were less than a month long and the majority (66%) less than two weeks in duration. The most common setting for a medical outreach trip was a "rural clinic/hospital" (48%) or "urban clinic/hospital" (28%).



A proposed best practice element is to make repeated medical outreach trips with a sponsoring organization in an effort to have a sustained impact (see Suchdev et al 2007). Of the sample surveyed, the majority of respondents (46%) said they travel for medical outreach once a year, or participate on a medical outreach trip with their sponsoring organization more than once a year (36%).

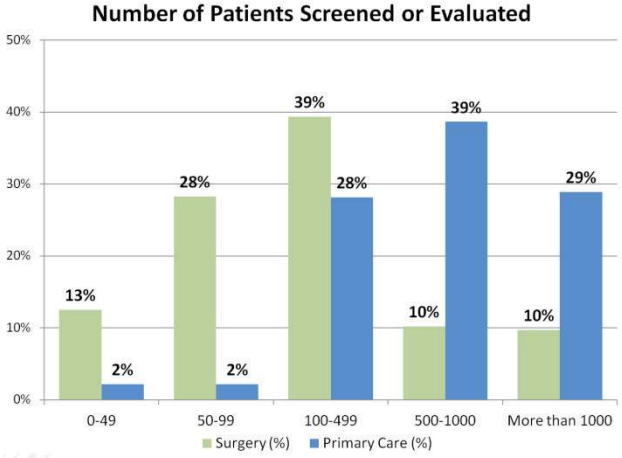
Teams with no licensed providers (7%) make up a higher percentage of respondents who selected "no repeated trips" and "once every few years" than teams with licensed providers. Additionally, teams with licensed providers were significantly more likely to agree that they were "well-equipped with necessary medicines, supplies and equipment" than the teams without licensed providers (p-value <.05).

[1]Trips with zero licensed medical providers were only eligible to receive a donation of over-the-counter products.

Of teams returning to partners more than once a year, academic organizations make the most frequent trips, though the sample size was too small to find a statistical correlation. Teams with a higher trip frequency are more likely to agree that they were able to contribute to a lasting impact in the local community, as were teams led by licensed providers when compared to teams without licensed providers (p-value <.05 for both conclusions).

Primary Care versus Surgery Trips

Half of the teams (50%) identified trip purpose as primary care, while nearly 40 percent said their trip purpose was to conduct surgeries. Of the 10 percent of responses marked "other" trip purpose, 38 percent performed a combination of primary care, surgery and/or dentistry. Primary care teams are most likely to go to an Urban Clinic/Hospitals and surgery teams are most likely to go to Community Health Centers. US-registered non-profits or foundations make the highest percentage of primary care trips (43%) when the data is cross-tabulated by organization type.



Those who indicated that the purpose of their trip was primary care screened larger volumes of people, while surgical trips screened a smaller number. Most surgical teams (87%) performed more than 20 surgeries during their trip –19 percent of surgical teams performed over 100 surgeries. The most common types of surgery were general, orthopedic, cleft lip and palate repair, OB/GYN and plastic surgery. Less frequent but notable were ophthalmic, otolaryngology (ENT) and urologic procedures.

Surgical teams completing a greater number of procedures are more likely to agree with the statement that there was an "ongoing mechanism for providing needed training and resources" to local practitioners (p-value <.05). Surgical teams were also significantly more likely to agree that they were "well-equipped with necessary medicines, supplies and equipment" than primary care teams (p-value <.05). Additionally, the more surgical procedures a team performed, the more likely they are to use medical-mission specific guidelines.

Less than half of respondents (44%) said their team follows surgical guidelines or protocols specific to medical outreach trips in less developed countries. When text responses were analyzed, the majority of those responding in the affirmative cite use of U.S. surgical guidelines or standards of practice. Only a small number of respondents listed surgical guidelines that are applicable for medical outreach work, such as AORN standards, WHO standards, SCIP guidelines and VIPS guidelines. Statistical analysis shows that surgical teams are twice as likely to follow any surgical guidelines if specific health outcome measures are agreed upon with local partners or if surgical teams completed a pre-trip assessment.

Best Practice Elements

Eighteen questions on the survey were specifically designed to solicit responses on the proposed best practice elements to determine the extent to which teams have incorporated them into their current outreach work.

Preparation: *Teams ready themselves for a trip through orientations, assessments of the current context and the attainment of adequate and appropriate supplies.*

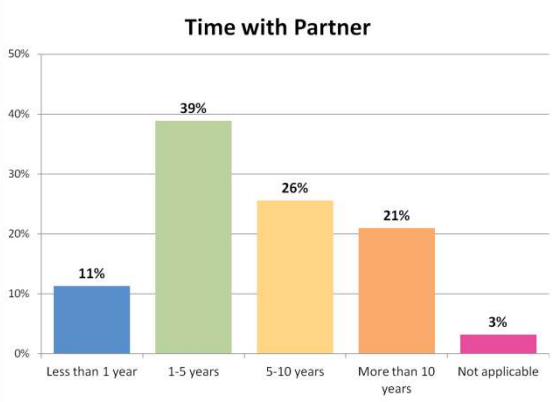
Many articles in the literature state that proper preparation is critical to the success of a medical outreach trip. Eberlin et al (2008) conclude that preparation is a "vital component of the overall success of any given mission and is therefore a lengthy process undertaken with great care." Survey data show, most teams prepare for a trip using some type of orientation. The most frequently cited types are reviewing mission goals and reviewing personal health and safety precautions. Interestingly, pre-trip review of overall trip goals is the most common orientation for surgical teams and the least common orientation type for primary care teams. Almost all of the teams (82% agree and 12% somewhat agree) said their members possess the necessary expertise and qualifications to address patient needs.

Also important to the success of the trip is knowing in advance what conditions teams will most likely encounter and can therefore travel equipped with the necessary and appropriate medicines and supplies. As Suchdev et al (2007) noted, "The positive effect of short-term trips can be maximized by designing interventions that target conditions for which the traveling group has adequate supplies." An open-ended question on most important medicines and supplies for trips yielded product lists consistent with requests received and those offered through AmeriCares.

In keeping with this best practice element, almost all teams (92%) performed an assessment of needed medicines, supplies and equipment before their trip. The majority of teams (57%) complete a pre-trip assessment of specific health conditions to be treated using data from prior visits or recent fact-finding trips to the target community. Interestingly, larger teams are statistically more likely to complete a pre-trip assessment of health conditions.

Partnership: ***Teams prioritize a relationship with a local entity and agree to cooperate while working toward a defined goal for a significant period of time.***

As Suchdev et al (2007) established, "Building a sustainable project involves working in a single location so that efforts can be augmented during successive trips. This approach demonstrates a commitment to an ongoing relationship and allows for a greater effect on the community's health." Almost all respondents (98%) partner with an in-country host organization with the most common type of partner being a local clinic or hospital (43%). Upon analysis and recoding of the "other" responses (n=72), the majority of those respondents (61%) said they work with a local faith-based organization.



Teams reported working with partner organizations for significant lengths of time. Almost half (46.6%) have worked with their partner for more than five years (5-10 years: 26%, more than 10 years: 21%), whereas only 11 percent of respondents reported working with the same partner for less than a year. Academic organizations are the most likely to have a partner for more than a year. Groups that take more frequent trips are more likely to use the same partner for longer periods of time and teams that have used the same partner for longer periods of time are more likely to have agreed upon specific health outcome measures before their trip. Statistical analysis also highlights the important effect of working with the same partner; the longer a team works with a partner organization, the more likely they are to agree that they "accurately assess in-country needs and agreed upon health outcomes" with their partner (p-value <.05).

According to the literature, a successful partnership will seek to "empower the local community and reduce, if not eliminate, the sense that they are mere recipients of aid" (DeCamp 2011, p. 97). Partnership is critical as is engagement with that partner to achieve goals. Though most teams have in-country partners, only 44 percent of respondents said their organization had discussed and agreed upon specific health outcome measures with their partner prior to their trip. Teams that have specific health outcome measures agreed upon with local partners are more likely to have completed a pre-trip assessment of local health conditions and are more likely to be surgical teams.

Eighty-one percent of respondents either agreed or somewhat agreed (60% or 21%) that their team "accurately assessed in-country needs and agreed-upon health outcomes with a local partner," and the overwhelming majority of respondents (84%) said their team works together with their local partner on a follow-up care plan for patients after the US-based team departs. Almost half of respondents (49%) said patients rely on follow-up care at a local clinic/hospital after the US-based team departs.

Education: ***Teams foster an environment of learning for local practitioners and community members through training events and lectures for local personnel and community members.***

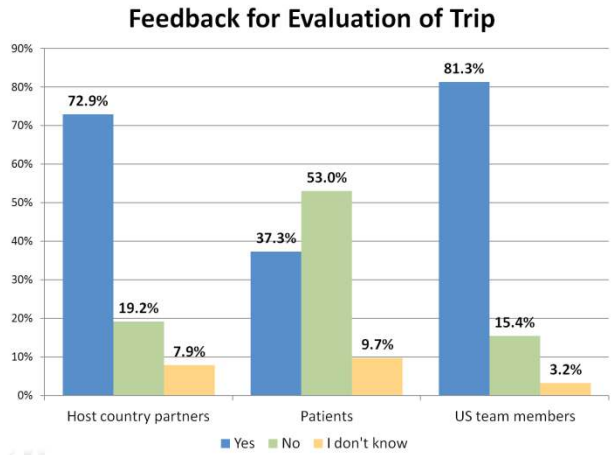
As DeCamp explains, "education is a cornerstone of increasing awareness as a way to foster long-term change" in the local community. Educational

programming will foster learning and growth on both sides of a medical outreach program by teaching trip participants about the community they hope to help and teaching recipients of aid about medical practices and advances.

Survey responses indicate that there are many different ways teams train local medical personnel during their trip. These include: lectures/seminars, direct patient care training during surgery, direct patient care training during primary care, grand rounds, certificate programs, leaving educational materials behind, sponsoring trips to the U.S. for local providers, or other methods.

The most frequent training method is to leave educational materials behind for local medical personnel, but teams also improve the educational experience of local personnel via direct patient care training during surgery or in a primary care setting and through lectures for local personnel during the trip. Common ways to support local health care providers after the teams depart include email communication, video/telephone conferences, or by leaving written instructions.

When asked about the success of their educational programs, 69 percent of respondents either agreed or somewhat agreed (39% or 30%) that, "there was an ongoing mechanism for providing needed training and resources to make lasting change" in the host country. Respondents from faith-based organizations were significantly more likely to choose a negative answer (disagree, somewhat disagree) and those from U.S.-registered non-profits or foundations were more likely to choose positive answers (agree, somewhat agree) (p-value <.05).



Evaluation: *Teams recognize the need for reflection and feedback from partners, patients and team members in order to improve the success of their intervention.*

Periodic evaluation is "important for measuring a project's effects and improving its design and implementation" (Suchdev et al, 2007). Without feedback from people associated with all parts of the outreach trip, complete and thorough evaluation cannot take place. Most teams solicit trip feedback from trip participants (81%) or partners (73%), but more than half (53%) do not ask patients for feedback.

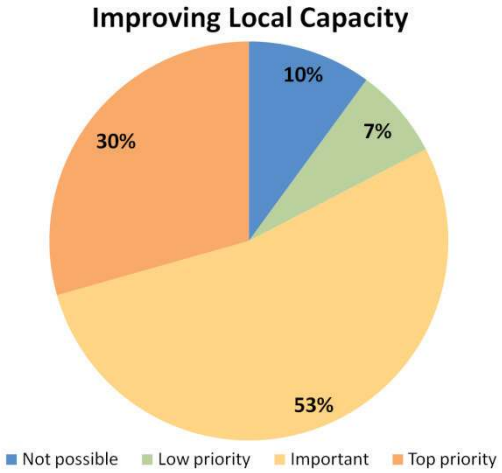
Analysis of the open-ended question regarding the components of a successful trip revealed that the most commonly listed criteria for judging the success of a medical outreach trip is the number of patients seen or treated, quality of care provided, knowledge transfer to local practitioners and successful health outcomes. Many teams indicated in narrative survey responses that they also judge the success of their trip based on feedback from local participants (including patients), value of the relationships they build while on their mission, or by their ability to treat patients. Survey respondents indicated that successful trips included "engagement of local leaders in our mission" or "improved communication and care coordination with local health providers."

Teams regularly report that they use health outcome data from each trip to plan future trips, make recommendations to local practitioners and provide written reports for the local community. The sharing of information with local practitioners and community members relates to a best practice because it ensures communication and feedback between trip participants and their host population (see Powell et al, 2010). Additionally, using health outcome data to inform the actions of future trips contributes to the sustainability of the mission.

Sustainability: *Teams work toward having a lasting impact on the population they interact with while positively influencing health outcomes.*

Medical outreach teams increase the availability of health care services in their target community to patients who would otherwise lack access or forgo treatment. Most teams said that while the services they offer may be available in the community, they are not accessible to patients because of cost (39%) or

distance (12%). Ten percent of teams offer a specialty service such as reconstructive surgery or diabetes management and 20 percent of teams offer a service that is unique and not otherwise available to patients from local providers.



Improving local health care capacity is ranked as a top priority (30%) or important priority (53%) of teams' medical outreach mission. Only seven percent of respondents said improving local health care capacity is a low priority and the last 10 percent said it is not possible given the team's mission. The majority of teams are working to have impact beyond immediate patient care and seek to improve local capacity alongside improving individual health.

Statistical analysis shows that teams which state that improving local health care capacity is a "top priority" are most likely to have agreed upon specific health outcome measures with local partners before the trip and those that said improving capacity is "important" are most likely to have completed a pre-trip assessment. The longer a team has been working with a partner organization in their host country, the less likely they are to rate improving local healthcare capacity as a "low priority." Analysis by other factors shows that teams that rank improving health care capacity as "top priority" or "important" are most likely to be primary care.

Seventy-eight percent of respondents felt that the services they offer during their medical outreach trip are essential to saving lives (49% agree and 29% somewhat agree), while almost all respondents (91%) either agree or somewhat agree (68% or 21%) that their team is able to contribute to a lasting impact in the local community.

The last two questions of the survey asked respondents to rate several statements on a Likert-scale (ranging from agree to disagree). The questions measured respondents' level of agreement with statements about team skills, supplies, in-country support, available resources and impact. For all 11 Likert-scale statements, higher scaled scores are correlated with having specific health outcome measures agreed upon with the partner before the trip, the priority of improving local health care capacity, a higher trip frequency, a higher completion rate of pre-trip assessment and/or following medical mission-specific surgical guidelines.

Discussion

This survey helps further our understanding of the current composition and practices of the medical outreach community. The sample population's activities fall within the general definition of short-term medical missions and the data reveals the diversity and decentralized nature inherent to medical volunteerism. Several themes are apparent. The most significant is the primary importance of collaboration and partnership in the ability of teams to implement best practices for improved impact of their medical outreach efforts.

Partnership emerges as a critical element of the Best Practices Framework: We consistently found a strong relationship between the incorporation of best practice elements and indicators of engagement. Nearly all respondents (98%) reported that their team works with a local organization in the host country and the majority of teams work with the same partner each year. Analysis shows that groups that make more frequent trips are more likely to use the same partner for longer periods. Additionally, length of partnership and frequency of trips are correlated with best practice elements such as the use of agreed-upon health outcome measures and pre-trip assessments, as well as a commitment to improving local health care capacity. The interaction required to accomplish these tasks may contribute to the quality of the partnership as well as the team's ability to improve health outcomes and local health care capacity. Overall, collaboration and partnership emerge as an overarching theme for enhanced impact.

Surgical teams incorporate many best practice elements: Respondents whose primary trip purpose was surgery were more likely to have worked with a well-established partner, trained local providers, pre-screened patients and agreed upon specific health outcomes prior to their trip. The majority of surgical teams (89%) worked to train local providers through direct patient care training during surgery, and almost half (48%) conducted medical seminars or lectures during their trip. This transfer of knowledge and skills contributes to the longer-term capacity of the local surgical practice.

Photo: Matthew McDermott

While only 57 percent of surgical respondents said they completed a pre-trip assessment of local health conditions, many wrote that they had a way to pre-screen patients including information provided by local providers, records from previous trips or even conducted short pre-trip visits to screen patients. Surgical teams were two times more likely than primary care teams to agree upon specific health outcome measures with their partner, indicating that surgical teams have a dialogue with their host partner and work with them to determine trip objectives.

The collective impact of teams is significant: Considering the immediate benefit of patient care alone, the collective impact of the many teams represented in the survey sample is impressive: 67 percent treat 100 or more patients during their trip of which 22 percent are seeing over 500 patients. Almost 70 percent of surgery trips complete between 20-100 surgeries. Volunteer medical professionals help many people access treatment and surgery that they might go without because of cost (39%) or distance (12%). Twenty percent of teams offered a unique service otherwise unavailable to the local population and 10 percent offer a specialty service that improves upon locally available expertise. Efforts to promote best practices for improving medical outreach collaboration and outcomes has the potential to make a real impact on improving global heath.

There are considerable practice and resource gaps: Gaps in current practices include low rates of pre-trip assessment of local health conditions and of gathering patient feedback, and mostly passive methods of education of local practitioners. Just over half (57%) of respondents said their team completed a pre-trip assessment of specific health conditions to be treated during the trip, though many indicated that they knew of prevalent health conditions from previous trips. Similarly, the proportion of teams seeking feedback from their own members and partners was quite high, but only 37 percent of teams solicit feedback from patients or beneficiaries during their outreach trip. Additionally, though almost all respondents said their team worked to train local medical providers, the most frequently chosen method was to "leave educational materials and/or equipment behind," followed closely by direct patient care training in surgery or primary care.

Many teams expressed a need for additional resources to execute sustainable medical outreach activities, such as knowledge of current conditions in a given country, advice on how to conduct medical outreach work in different populations, and standards or guidelines for medical outreach teams. Survey respondents expressed a desire to connect with others on common standards, teaching and assessment tools, consultations, or simply sharing experiences and reports with other teams.

Based on our analysis, a medical outreach team likely to include best practice elements might be a large team sponsored by a U.S.-registered nonprofit or foundation going on short but frequent trips to perform surgical interventions with a local partner that they have worked with for multiple years. We recognize, however, that many teams may not fit this composite profile but do good work. Even the most robust of partnerships can benefit from technical assistance and cross-team sharing related to the implementation of best practices.

Limitations

Although the survey was administered via SurveyMonkey and results were anonymous, recipients were previous AmeriCares Medical Outreach program donation recipients. Respondents were self-selective and were asked to respond about their most recent trip, but the survey was only open for two weeks. Inaccurate recall may be a limiting factor, as time had elapsed between a respondent's most recent trip and the date they took the survey. Additionally, at 38 questions, the survey was fairly long and the length and time commitment may have deterred potential respondents from completing the survey.

The data from the Likert-scale questions can contain the respondents' social desirability bias, because respondents may have marked the answer they believe we wanted to hear or chosen a more positive view of their medical outreach team. Similarly, Likert-scale questions always risk a central tendency bias, which occurs when respondents avoid choosing the extreme options (agree or disagree).

Additionally, the statistical analysis could not draw conclusions from data for some response categories with small sample sizes such as teams sponsored by a medical association, or hospital. Finally, this survey lacks external reference points as there is a scarcity of research on short-term medical outreach trips and it was not within the scope of this research to look at the long and short-term health outcomes of the trips studied.

Conclusion

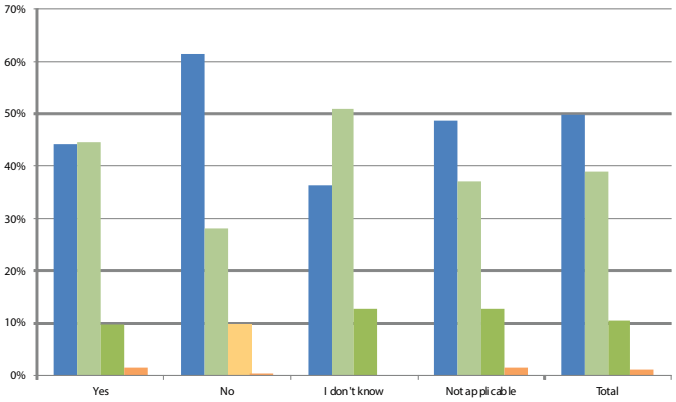
The collective impact of medical outreach efforts to improve health and health care capacity in low-resource communities is impressive. Many teams are incorporating elements of the best practices framework already and have developed effective tools and expertise that contribute to lasting impact. However, implementation is uneven and there are limited opportunities for information sharing and a lack of common protocols or standards outside of specific medical specialty areas or organizational affiliations.

AmeriCares seeks to increase the consistency of implementation by creating opportunities for resource sharing and collaboration around these efforts. We have created an open-access website, the Medical Outreach Exchange, to achieve this goal and reinforce the Best Practices Framework. Included on the site are technical assistance resources, profiles of medical outreach organizations, and blog posts from thought leaders and practitioners in the field. We encourage you to use and contribute to the Exchange and promote the Framework.

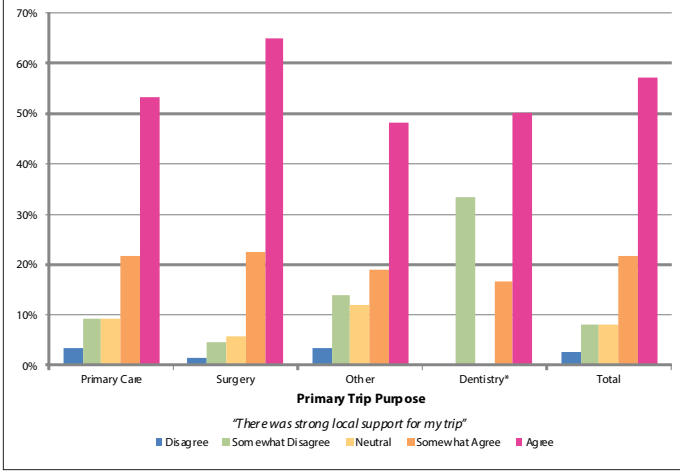
For the Best Practices Framework and related resources, visit the Medical Outreach Exchange at medicaloutreach.americares.org.

Graphs of Statistically Significant Correlations in the Data

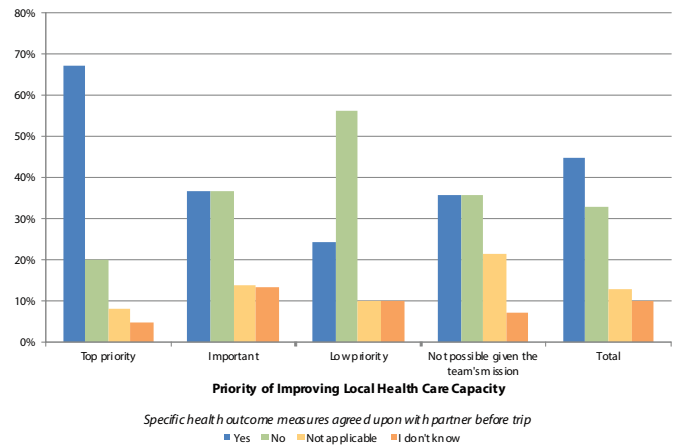
Primary Purpose by Agreement of Specific Health Outcomes



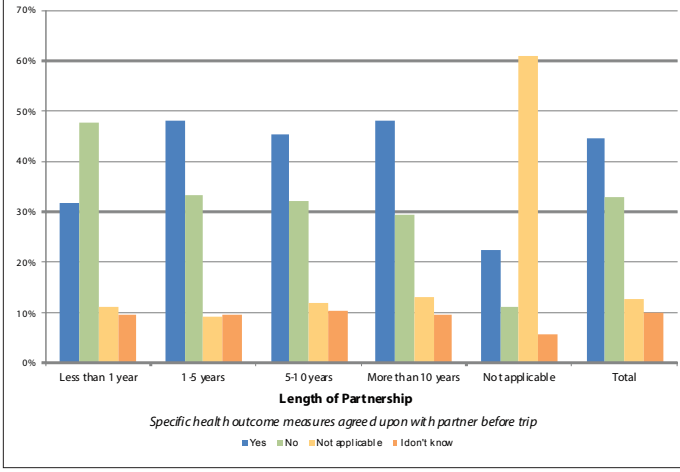
Local Support by Trip Purpose



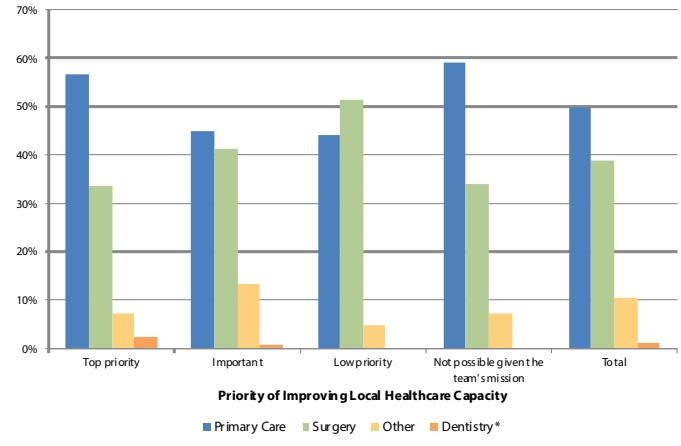
Measurement of Outcomes by Priority of Improving Capacity



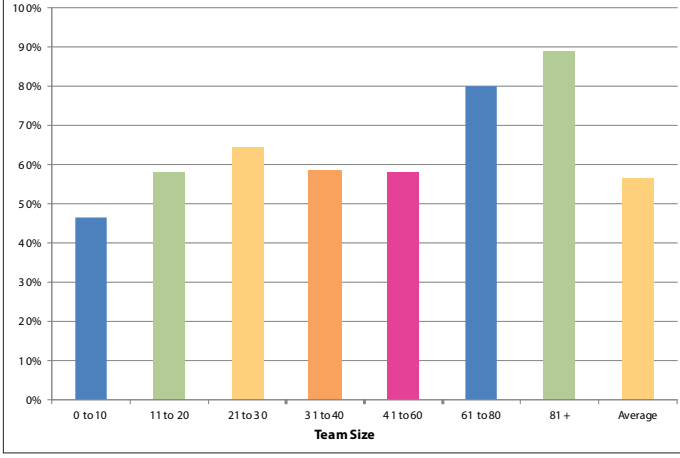
Measurement of Health Outcomes by Length of Partnership



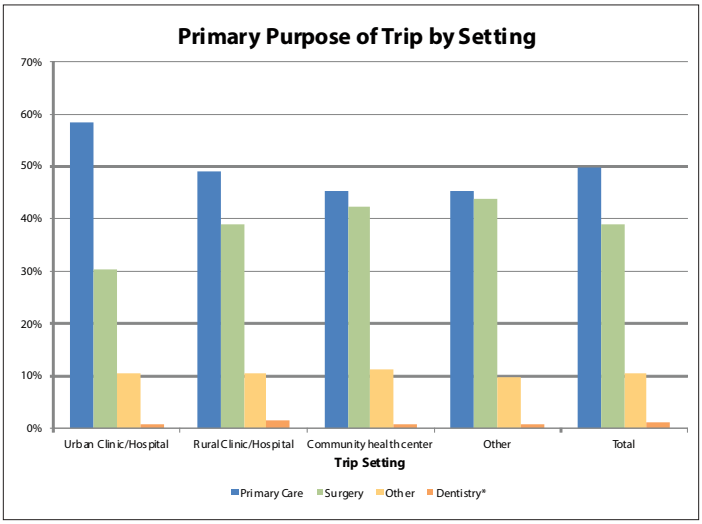
Trip Purpose by Priority of Improving Capacity

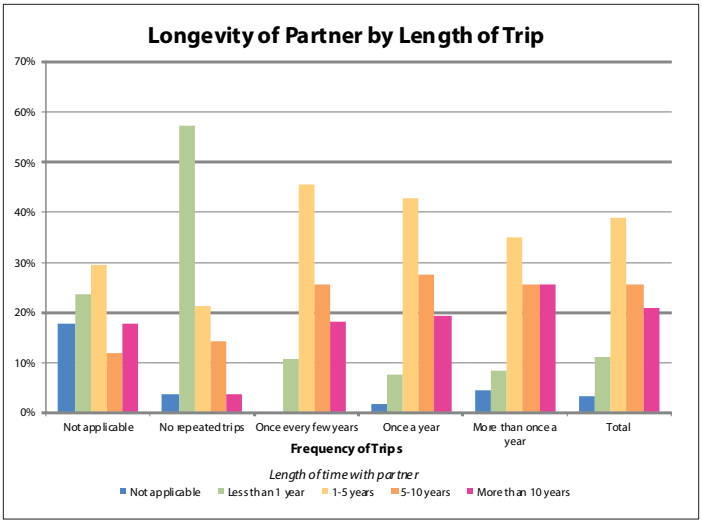


Completion of Pre-trip Health Assessment by Team Size



Graphs of Statistically Significant Correlations in the Data





AmeriCares Medical Outreach:

We support over 1,200 teams traveling to more than 80 countries each year with donations of medicines and supplies. We see incredible work as well as the need to connect efforts and share best practices. The Medical Outreach Exchange provides comprehensive resources for your medical work as well as opportunities to connect with and learn from others.

View inventory and resources on the Exchange at: medicaloutreach.americares.org

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